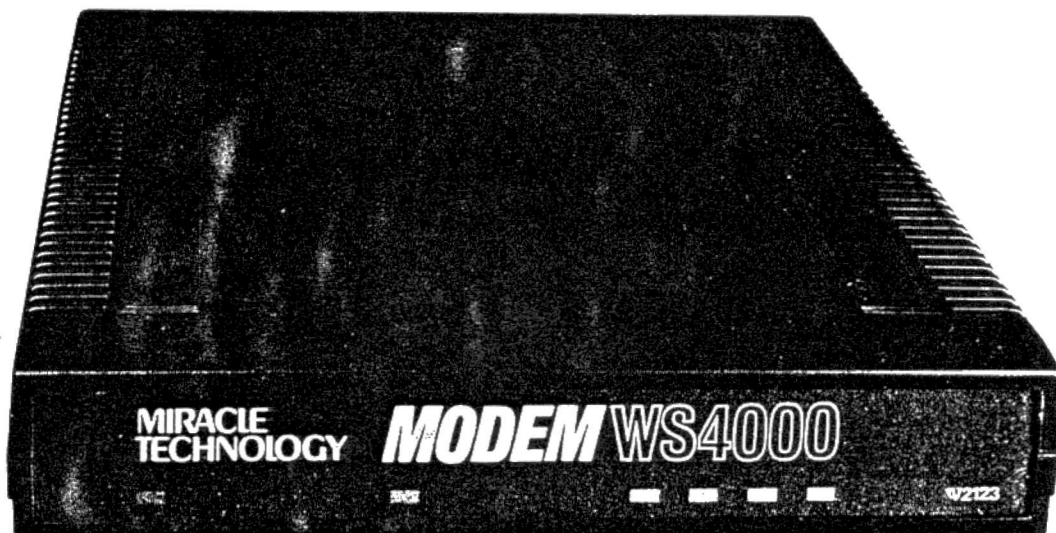


Greenbank Electronics
Telephone: 051-645 3391

AUTO ANSWER AUTO DIAL MODEM

FEATURES:

- Fully intelligent
- Hayes compatible
- Upgradeable
- Autoanswer/Autodial
- Speed buffered
- Host of optional extras
- Low price



The WS4000 modem brings intelligent, Hayes compatible V21/23 data communications within the price range of every computer owner.

As a modem designed to suit the needs — and the pocket — of the serious home user and business man alike, the WS4000 has no equal. It offers the very latest in data comms technology — Hayes compatibility, autodial, autoanswer, speed buffering and much, much more — at a price others just can't match.

The wide range of available data rates make this a very powerful multi-speed modem indeed. It operates at the CCITT standards for 300 bps, 75/1200 bps and 1200/75 bps full duplex, 600bps and 1200bps half duplex. These speeds give access to a host of information databases and bulletin boards, electronic mail, telex, and user-user communications.

The speed buffered RS232 port allows even those computers with full duplex only facilities to access services such as Prestel or Telecom Gold, which operate on a 'split' data rate system. So major information services are now within the capability of most computers.

computer or terminal keyboard, the WS4000 is simple to operate, helped by the logical command structures and a comprehensive step-by-step instruction manual. The full autodial and autoanswer facilities also contribute to making this modem ideal for those users who have little technical knowledge.

The WS4000 modem is unique in offering a very wide variety of optional upgrades and extras, including the 1200bps and 2400bps full duplex CCITT V22 and V22bis standards, and the American 300bps BELL 103 standard.

The HAYES software command protocols used by the WS4000 allow the use of an enormous range of well-proven communications software. Controlled by 'plain English' commands entered from the

After upgrade, all features of the basic model are retained, giving a multi-standard modem in a single compact unit, capable of data transmission speeds from 75bps to 1200bps or 2400bps.

Modem DTE interface speed capability
Intelligent speed buffering allows DTE operation at 1200bps full duplex for modem operation at 1200/75, 75/1200, 1200bps. DTE may also operate at 300bps full duplex for 300/300bps or 600bps for 600bps modem operation. DTE may also operate at split baud rates

Pin no.	Input to Modem/ Output from Modem	Function	CCITT circuit
1	—	Modem frame ground	101
2	I	Send Data (SD)	103
3	O	Received Data (RD)	104
4	I	Request to Send (RS)	105
5	O	Clear to Send (CS)	106
6	O	Data Set Ready (DSR)	107
7	—	Signal Ground	102
8	O	Data Carrier Detect (DCD)	109
9	O	Test (+5Vdc)	—
10	O	Test (-12Vdc)	—
20	I	Data Terminal Ready	108
22	O	Ring Indicator	125
23	O	Data Signalling Rate	111
25	O	Test (+12Vdc)	142

Internal pull-up resistors enable DTR and RTS if these control signals are not available from the DTE.

Control port option

Configurable control port with 26-way 2-row 0.1" male bump polarised socket. 8-bit port custom configurable to both input and output for process control applications involving direct sensor inputs and remote data logging via modem link.

Line noise filtering

Selectable fixed amplitude equalisation in V23 mode

Activity indicators

Front panel LED indicators for:

Power	(ON)
On line	(OL)
Carrier Detect	(CD)
Send Data	(SD)
Receive Data	(RD)
Auto Answer	(AA)

Safety

WS4000 is designed and constructed to comply with the relevant requirements of the following British Standards:
BS 415, BS 6301, BS 6305, BS 6320

TECHNICAL SPECIFICATION

Dimensions

Width	182mm	(7.2")
Depth	243mm	(9.6")
Height	38mm	(1.5")
Footprint	.044 sq m	(0.48 sq ft)

Weights

modem	0.79kg	(27oz)
power adaptor	0.34kg	(12oz)

Case type

High impact ABS, wipe-clean textured surface

Power requirements

240 V~50/60Hz single phase +2% -8% less than 15 watts. Separate power adaptor

Environmental conditions

Operational ambient temperature range +5C to +30C

Modulation method

Asynchronous Frequency Shift Keying

Transmission path

2 or 3-wire public switched telephone network. Leased line model WS4000LL

Line terminating characteristics

Terminating impedance 600 ohms

Line termination type

British Telecom Series 600 modular plug type 431A. Modem rear panel 600 series telephone socket, paralleled with PSTN line

Line connection mode

Manual or autodial by open-loop pulse dial, or by optional DTMF touch-tone. Manual or autoanswer to CCITT V23

Line disconnection on:

Loss of DTR
Loss of Carrier
Loss of Data Activity

Transmitted signal level

-9dBm maximum into 600 ohms

Received signal minimum level

-43dBm

Data signalling rates

300/300bps, 600bps, 1200bps, 1200/75bps, 75/1200bps

Standards

CCITT V21, V23, BELL 103 option

Data format

Asynchronous 7 or 8 bits, odd, even or no parity. Software configured, no modem settings required

Mode selection

Operating modes software selectable by HAYES-compatible command strings entered from the DTE. Command set broadly compatible with HAYES protocols, except where UK regulations or enhanced modem operations require differences

Modem DTE interface

EIA RS232C/CCITT V24 compatible DTE interface

Modem DTE interface connector

DB 25 female 25 pin socket

Order Code: WS4000
Price: 150.00 + VAT